



# ***The Resonator***

**Official Newsletter of The Fair Lawn (NJ) Amateur Radio Club**

**Volume 10, Number 1**

**[www.FairLawnARC.org](http://www.FairLawnARC.org)**

**January 2025**

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## **President's Message**

Hello FLARC Members,

First of all, I would like to thank everyone who voted for me for FLARC president for 2025. I would also like to thank last year's officers for all their hard work and dedication.

For the members that could not make it to the December meeting and Holiday party, we missed you. We had 30 members and about 15 guests. Four of the guests were from KJL electronics, who donated three very nice door prizes. A good time was had by all. Besides elections, an important item of club business was voted on at the meeting concerning our incorporation and is reported in this issue of the newsletter.

I also had the pleasure of awarding the 2024 FLARC **Member of the Year** to Noel W2MSA. Congratulations again and well deserved!! As we all know, Noel W2MSA is our winter Field Day Chairman (as well as our Station Manager). Winter Field Day will be held on Saturday *January 25* and Sunday *January 26, 2025*. The location, as always, is in Memorial Park. Please send an email to Noel if you are willing to help and have not done so. His Email is: [noelw2msa@gmail.com](mailto:noelw2msa@gmail.com).

Please mark your calendar for Saturday *March 8, 2025* for the Ridgewood STEM program. This undertaking is being headed up by Robert, KD2SOG. You can contact him at [ROBERTMARCHINI1893@gmail.com](mailto:ROBERTMARCHINI1893@gmail.com).

Always remember to READ and follow the FLARC **groups.io** for all the latest club news and information. If you are not part of our groups.io or have trouble getting it please contact Jim W2JC at [FLARC@jimcooper.org](mailto:FLARC@jimcooper.org).

I know June 2025 is quite a while away, just over six months from now. However, June is a remarkably busy and big month for the club.

**Remember:**  
**Ham Radio Is a Contact Sport!**

Continued on next page.

## President's Message, continued

We can start with *June 2, 2025*. We will be setting up a booth at the Fair Lawn Street Fair.

Moving forward we have picked *June 14, 2025* for our annual Hamfest – with a rain date of June 21, 2025. We are looking for a Hamfest chairman. This will be our fifth Hamfest and everything is well documented from the past years and will help guide the new chairman.

Robert KD2SOG and I will be glad to help any way we can. One or two weeks later is Summer Field Day weekend. We again need a chairperson to help organize everything for Field Day. There is always plenty of support from our membership. Summer Field Day will be held the last weekend of June — the 28th and 29th.

I have given a lot of thought about what I would like to accomplish this coming year. My goal is to try to get more of our members involved in activities with the club. I will be actively working with my vice president Nomar NP4H and other club members on putting together a plan to try and make this happen.

Please feel free to contact me at any time with any kinds of questions or suggestions you may have.

Thank you again for putting your trust in me.

Gene, WO2W  
wo2w@arrl.net



## The Year in REVIEW

By Jim Jalil W2KNG

The year 2024 was another successful year for the Fair Lawn Amateur Radio Club. The year began in the cold and dark of winter (always good for 160-80-40 meters). If winter is here can Winter Field Day be far behind?

Noel W2MSA worked his usual magic organizing and running the 2024 Winter Field Day. A good number of members braved the elements (though more are always welcome) and FLARC made a decent showing. One advantage FLARC had was the use of the Pompton Lakes Emergency Communication Van. This provided a (relatively) warm space for three operating stations.

In March several FLARC members participated in the Ridgewood Super Science Saturday. This is an event geared primarily for grammar and middle school children. FLARC's ham radio presentation there was much appreciated by the sponsors of the event and was one of the most popular exhibits. They have asked us back in 2025!

Winter soon turned to Spring and while some people begin to think of baseball and warm weather, a ham's attention immediately focuses on the ham radio main event of the year... Field Day. This year FLARC tried something different, a confederation of committees without a head "grand-pobah." While the system worked, the consensus seems to be that being pobah-less led to a bit of disorganization at the event itself.

However, Field Day remained the success it has always been and to say a good time was had by all would be an understatement. Those who were there can never forget Steve WI2W's masterful use of the blow-gun-antenna cannon-projectile launcher (when he did not forget to release the bail).

Who can forget Ken W2SCT's steady and patient work at the CW station unfazed by all the commotion around him? Of course no one can fail to remember Nomar NP4H working CW at 60 wpm while drinking coffee and carrying on three conversations all at once. The highlight of the

Continued on next page.

## The Year in REVIEW, continued

event however was Chef Skip KD2BRV grilling hamburgers and hot dogs in a driving rainstorm unfazed by torrential downpours, hurricane force winds and Frankenstein-like lightening. When it comes to food Chef Skip lets nothing stand in the way of a good hamburger.

The “Sunday Morning Breakfast Club” gained traction and popularity in 2024. Several hams came together at the Clubhouse each Sunday at 9:00 AM to nosh on bagels, work on projects, sometimes check into a local VHF net and most of all talk ham radio.

Speaking of working on projects, one of the most amazing benefits of being a member of FLARC, in addition to many others, is access to a fully equipped and truly amazing workbench and tool chest, available for use by any member in good standing. Along with the workbench of course comes a gaggle of fellow hams ready to help, comment and provide invaluable experience.

What is warm weather in New Jersey without hamfests? FLARC’s hamfest, after an initial rainout, was its usual success with many treasures (and boat anchors) exchanging hands.

Gene W02W’s sonorous voice over the loudspeaker announcing door prize winners and trying to sell hot dogs is synonymous with our hamfest. Judith KC2LTM manned the refreshment stand as steady as always and made sure no attendee went hungry (for a price).

FLARC again participated in the Paterson Falls Earth Day, sponsored by both the National Park Service and the Paterson School District. FLARC set up a working HF station, displays and information about ham radio available to a multitude of school children. The highlight of the event, as it seems to be every year, was Captain Larry WA2ALY’s masterful demonstration of Morse Code to eager children. Captain Larry seems to have a knack of getting a youngster’s attention and respect as each child is taught to send his or her own name in Morse Code. One never knows if a spark winds up being ignited that someday leads to a young person becoming a ham. If not, at least each child

comes away understanding the basic theory of Morse Code.

As summer gave way to autumn preparation began for the Annual FLARC Auction. This is always held on the day after Thanksgiving. A good crowd was on hand to bid on everything from small tools to elaborate HF radios. The event takes a lot of organization and coordination and as always was a great success.

Throughout the year POTA activity among FLARC members remained strong. POTA activation has come to be a significant ham radio focus for many members and there is no doubt FLARC is gaining a well deserved reputation in this aspect of amateur radio.

In addition many members, led by Jim N2JLF, as well as Dave KD2MOB, remain very active in EmComm (Emergency Communications), ARES and RACES, as well as coordinating in many ways with the American Red Cross. The importance of those activities cannot be understated and their efforts reflect well on the Fair Lawn Amateur Radio Club.

In all, 2024 was a successful and ham-filled year for the members of the Fair Lawn Amateur Radio Club. The goal every year, however, is to be the best, the friendliest, the most active and service oriented ham radio club it can be. If that truly is the goal, then FLARC had a very successful year indeed.



## Our Sponsors

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KB<sup>3</sup>



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We very much appreciate the Sponsorships and Door Prize Donations received from the groups and companies whose logos are shown above.





## Notable Hams

by Jim Jalil W2KNG

This column features notable hams both past and present. This month we feature a renowned scientist and noted university professor, Paul Horowitz W1HFA.

Among the many distinctions Paul Horowitz is noted for, perhaps the most famous, at least for those hams who studied electronics in college, is that he is the author of the basic textbook almost universally used in electrical engineering courses, "The Art of Electronics."

He is also a noted radio astronomer and is closely associated, along with the late Carl Sagan, with the search for extraterrestrial life.



Paul Horowitz W1HFA

Paul Horowitz came to Harvard University in 1961 and never left. He received his undergraduate degree in physics in 1965, his Masters in 1967 and his doctorate in physics in 1970. He then joined the Harvard faculty and has been a Professor there ever since, teaching courses in both physics and electrical engineering.

His research achievements are varied, including having worked on the development of a

scanning electron microscope – a specialized microscope which focuses a beam of electrons on a specimen to produce an accurate image of the topography. He has applied radio astronomy in the investigation of pulsars. Not content with just that, he has also conducted research in the area of biophysics, which studies the physical qualities (for example the electric charge, stress, entropy) of biological life forms. He also designed and developed an acoustic mechanism for landmine detection.

Paul Horowitz is also well known and respected among those engaged in the search for extraterrestrial life. He was a key collaborator with the late Carl Sagan in the SETI project (Search of Extraterrestrial Intelligence).

In the early 1980s Paul Horowitz designed a spectrum analyzer specifically intended to search for SETI transmissions. Later he was instrumental in developing the META ("Mega channel Extra-Terrestrial Assay"). The META spectrum analyzer had a capacity of 8.4 million channels, a channel resolution of 0.05 Hertz and uses frequency Doppler shift to distinguish between signals of terrestrial and extraterrestrial origin.

At one time Horowitz was sharply criticized publicly by a fellow Harvard professor for "wasting time and resources" on the search for extraterrestrial intelligence. This caused a bit of a stir at the time. Carl Sagan came to his defense with a public statement of support of his efforts, which was signed by 69 renowned scientists worldwide. That ended the criticism, at least in public.

Paul Horowitz has been a lifelong ham. In fact it is generally believed he was the youngest ham ever to receive an amateur radio license. He was 8 years old.

While this may or may not be true, one suspects he might have been the youngest ham to deeply understand the radio theory portions of the FCC exam.

Continued on next page.

## Notable Hams, continued



W1HFA age 8

Whatever Paul Horowitz's scientific interests have led him, his first love has always been radio. His early work was in the late 1970s at ARICEBO, the largest radio receiver on earth at the time, where in 1978 he conducted ground breaking research on radio signals from far off star system, including pulsars.



Paul Horowitz Working at the ARICEBO Telescope

His interest in radio led him to combine his physics background and scholarship with electrical engineering. As stated above he not only teaches physics at Harvard, he also teaches electrical engineering courses. This led him to write (along with a co-author) the basic electronic engineering textbook (now in its third edition) widely used to this day by electrical engineering students entitled —

“The Art of Electronics”

Countless electrical engineers owe a small part of their electrical engineering education to a ham radio operator, Paul Horowitz W1HFA.

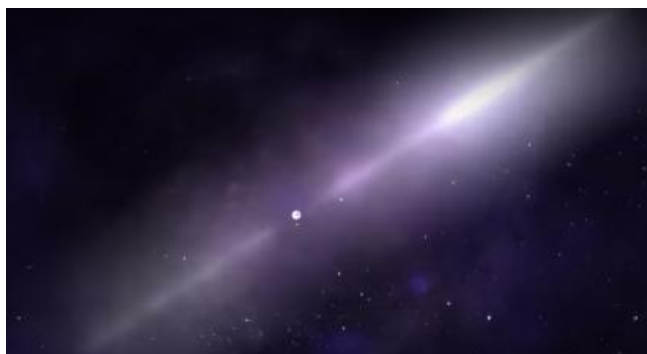


In his varied research activities Paul Horowitz did not forget ham radio. In his spare time he developed an electronic Morse Code/Baudot code keyboard using a diode matrix and 66 TTL integrated circuits designed specifically for ham radio use.

Paul Horowitz is a many talented academic, inventor, researcher, scientist and author. As with many such accomplished men and women, he got his start by becoming a ham radio operator at a very young age.

Renowned as he may be, to us he is just a fellow ham, Paul W1HFA.

## Professor Paul Horowitz W1HFA





The Westchester Emergency Communications Assn.  
Box 831 Sleepy Hollow, NY 10591

[www.weca.org](http://www.weca.org)

2025

## Amateur Extra Ham Radio Class!

WECA will be conducting a **free** Amateur Extra FCC license exam preparatory class that will run for ten weeks **starting on Tuesday, January 7<sup>th</sup>** and on **Tuesday nights thereafter from 7-9:15 PM Eastern Time in-person** at the Westchester Fire Training Center, 4 Dana Road in Valhalla, NY 10595\*\* **and via Zoom**. VE test sessions are available in the area and at the FTC (\$15 testing fee).

Please join us for this **free** interactive course taught by a team of knowledgeable Amateur Radio Operators from WECA. Instructors will be Amateur Extras or others who have special knowledge of specific subject areas. The class will review the test pool questions and answers and provide explanations of the accompanying concepts. There are >700 questions in the pool: 50 test questions; 37 correct (74%) to pass. **All are welcome to attend** who wish to gain additional knowledge of amateur radio subjects even if you do not expect to take the test or do not hold an amateur license.

All WECA classes are recorded and posted to [www.WECA.APP](http://www.WECA.APP) for review and self-study.

### Texts:

1. ARRL Extra Class License Manual 13<sup>th</sup> Edition w/link to Practice Exam Software

<https://home.arrl.org/action/Store/Product-Details/productId/2016746457>

2. ARRL Extra Q&A 6<sup>th</sup> Edition

<https://home.arrl.org/action/Store/Product-Details/productId/2016747300>

or from Gene W2KJI at KJI Electronics, Cedar Grove, NJ on 973-571-1930;

Gene is a reputable local ham radio dealer, or from

Amazon- Be very sure to order the correct editions.

1. Please purchase the license manual and begin reading as soon as possible.

2. The Q&A has answers and brief explanations for all pool questions- a worthwhile investment.

### Conduct of Training:

Subjects include: FCC regulations, operating procedures and practices, radio propagation, electrical principles, practical circuit components and design, modulation, emissions, antenna design, transmission lines and safety.

If you have an area of strong interest and expertise that you can share with the group, please let me know; we will involve you in the class.

If you would like to upgrade to Amateur Extra, please contact me by email at [Education@WECA.org](mailto:Education@WECA.org) so I can register you and provide additional information.

**Larrie Sutliff W2UL**

**WECA Education Director**

\*\* If you haven't been to the FTC before, you need to know that we enter through the rear door (the front door is typically locked/no parking). From Route 9A, with the Hawthorne Home Depot at your back, proceed East on Dana Road about 2/10 of a mile, past 4 Dana Road, and turn right on Walker Road. Park in the long lot on the right and go down the outdoor stairway, pass the trailer and enter through the glass doors. Classroom #3 is down the hall to the right. Handicapped access is available at the training level- just park in front and use the security phone or call me on 732-693-4504.

**FTC Closing Weather Number: 914-231-1615**





The Westchester Emergency Communications Assn.  
Box 831 Sleepy Hollow, NY 10591

[www.weca.org](http://www.weca.org)  
2025

## Amateur General Ham Radio Class!

WECA will be conducting its annual **free** preparatory class for the Amateur General FCC exam this spring **in-person** at the Valhalla Fire Training Center 4 Dana Road in Valhalla, NY 10595 **and via Zoom**. The class will run for nine weeks **starting Tuesday evening March 11<sup>th</sup> from 7-9:15 PM ET**. Subsequent classes will be on Tuesday evenings per the schedule below. Holders of the General license are permitted many additional frequency privileges including access to all HF bands, therefore,

### Capability to talk to the World!

Please join us for this free interactive course taught by a team of knowledgeable Extra and General Class Amateur Radio Operators from WECA. The class will review the test pool questions and answers and provide explanations of the accompanying concepts. All are welcome to attend who wish to gain additional knowledge of amateur radio even if you do not expect to take the test or have a license.

All classes are recorded and posted on [www.WECA.APP](http://www.WECA.APP) for review and self-study.

### Texts:

1. **The ARRL General Class License Manual 10<sup>th</sup> Edition** (includes access to on-line practice)
2. **The ARRL General Q&A Manual 7<sup>th</sup> Edition** (Includes explanations for all questions.)

Both are available from ARRL at:

<https://home.arrl.org/action/Store/ProductDetails/productId/2009476073> or from:

Gene W2KJI at KJI Electronics, Cedar Grove, NJ: 973-571-1930;

Gene is a reputable local ham radio dealer or from:

Amazon- Be very sure to order the correct editions.

1. **Please purchase the License Manual and begin reading as soon as possible.**
2. **The Q&A manual is also very helpful, but not required.**

### Syllabus & Schedule:

3/11	Tuesday	Ch 1	The General Class License & Ham Radio
		Ch 2	Procedures and Practices
3/18	Tuesday	Ch 3	Rules and Regulations
3/25	Tuesday	Ch 4	Components and Circuits
4/1	Tuesday	Ch 5	Radio Signals and Equipment
4/8	Tuesday	Practical Exercise: HF Station Equipment Display & Antenna Install	
4/15	Tuesday	Ch 6	Digital Modes
4/22	Tuesday	Ch 7	Antennas
4/29	Tuesday	Ch 8	Propagation
5/6	Tuesday	Ch 9	Electrical and RF Safety, Review
5/8	Thursday	VE Test Session in Valhalla, NY	

If you would like to upgrade to Amateur General, please contact me at [Education@WECA.org](mailto:Education@WECA.org) so I can register you and provide additional information.

Larrie Sutliff / W2UL

WECA Education Director

**FTC Closing Weather Number: 914-231-1615 (Zoom conducted even if FTC closes)**



## Get Direct With FLARC!

Here are direct links to specific club info:  
just a click away!

<http://apparel.FairLawnARC.org>  
<http://auction.FairLawnARC.org>  
<http://blog.FairLawnARC.org>  
<http://calendar.FairLawnARC.org>  
<http://events.FairLawnARC.org>  
<http://exams.FairLawnARC.org>  
<http://facebook.FairLawnARC.org>  
<http://news.FairLawnARC.org>  
<http://swap.FairLawnARC.org>  
<http://tech.FairLawnARC.org>  
<http://youtube.FairLawnARC.org>

<https://groups.io/g/FairLawnARC>



## 2025 Dues

**New members: only \$20 for your first year !**

**There are no changes to dues for the upcoming year.  
Renew now, and let us know what activities or  
features would make you more active with the club.**

**Please make checks payable to:  
"Fair Lawn Amateur Radio Club"  
and send them to:**

**Fair Lawn ARC  
– Attn: Treasurer  
10-10 20<sup>th</sup> Street  
Fair Lawn, NJ 07410**

**Please include a member application form with your  
\$25 check regardless of your member status.  
It can be found near the back of this newsletter.**



## FROM OUR STATION MASTER

The Fair Lawn Amateur Radio Club is proud to have five operating stations at our Clubhouse. Many members regularly enjoy operating these stations either casually or during contests.

As Station Master, I am committed to expanding the use and enjoyment of these stations by all our members. If any member wishes to learn how to operate any station at any position, I am more than happy and willing to sit down at any operating position and walk you through 6 simple steps to get on the air. These include :

1. Turn on power supply
2. Connect antenna at patch panel
3. Turn on radio
4. Select desired band/mode
5. Adjust volume (AF) to desired level
6. Tune VFO to desired frequency

If you would like to learn more about our great stations, reach out to me and we can arrange a quick training session.

— Noel Pagan W2MSA



Here's Robert KC2ORX making POTA contacts on 20 meter phone at station #4 after a little guidance.

# The Fair Lawn Amateur Radio

Why is FLARC New Jersey's Most Exciting Radio Club?



## Annual and Special Events



- Field Day
- Winter Field Day
- World Amateur Radio Day
- Portable Day
- Earth and Environmental Days
- Field Trips
- Club Exchanges
- Special Even
- Public Service Activities
- Public Events
- Ham fests and Auctions
- Foxhunts
- Contests
- Youth Activities and more

## There Is Something Every Night At FLARC!

Monday: Near and Far Net

Tuesday: DMR Net and Open House at the clubhouse

Wednesday: ARES/RACES Net

Thursday: Tech Net

Friday: Open House at the clubhouse or *Kawfee Tawk* Speaker Series (Monthly via Zoom)

Weekends: Open House at the clubhouse, POTA and other station activations, Contests, Foxhunts



## Special Interest Groups

- Portable Ops (POTA, SOTA, etc.)
- DX: Chase the rare ones
- Digital Voice: DMR and other modes
- FT8: Plus, other WSJT modes
- Satellite: Also, for weather interests
- Monitoring: SWL and other listening
- Contesting
- EMCOMM
- Radio Direction Finding
- Raspberry pi, Arduino



## Plus:

- A five-position operating station clubhouse
- An active repeater—W2NPT linked with NJ2BS.
- New antennas on the roof
- Monthly VE testing
- An award-winning newsletter
- Monthly speaker programs
- Educational programs and activities
- Active in-person and social networking
- An extensive video education archive

## That is Why FLARC Is the Most Exciting Club Around!

Come join us in-person or via Zoom for more activities, speakers, and projects!

[www.fairlawnarc.org](http://www.fairlawnarc.org)



**The Club** Fair Lawn ARC is the fastest growing ham club around, with five operating positions in a permanent clubhouse. Visitors and guests are always welcome. The club is open every Friday night, except when there is a Business Meeting scheduled, from NLT 6:30 PM. Business meetings are the first Friday of the month at 7:30PM.

#### 2025 Officers, Committees and Assignments

President	Gene Ottenheimer	WO2W
Vice President	Nomar Vizcarrondo	NP4H
Treasurer	Robert Marchini	KD2SOG
Secretary	Jim Cooper	W2JC
Trustee	Judith Shaw	KC2LTM
Trustee	Lowell "Van" VantSlot	W2DLT
Trustee	Noel Pagan	W2MSA
Member Services	Judith Shaw	KC2LTM
Health & Welfare	Nomar Vizcarrondo	NP4H
Marketing	Jim Cooper	W2JC
Program	[open]	
Video/YouTube	Thom Guida	W2NZ
Social Media	Brian Duddy	N2BTD
	Thom Guida	W2NZ
	Dave Marotti	NK2Q
Photographer	Robert Marchini	KD2SOG
Community Relations	Gene Ottenheimer	WO2W
	Dave Gotlib	KD2MOB
Field Day2025	[open]	
Winter Field Day 2025	Noel Pagan	W2MSA
Hamfest	Gene Ottenheimer	WO2W
Auction	Brian Cirulnick	KD2KLN
Activities Chair	Judith Shaw	KC2LTM
Education	[open]	
Youth Outreach	Robert Marchini	KD2SOG
Adult Outreach	Lowell "Van" VantSlot	W2DLT
	Jim Cooper	W2JC
VE Testing Coordinator	Gene Ottenheimer	WO2W
Special Events	James Gallo	KB2FMH
Contests	Lowell Vant Slot	W2DLT
FLARC Historian	Fred Belghaus	KR2H
Webmaster	Jim Cooper	W2JC
Technical Chair	Dave deCoons	WO2X
EmComm	Jim Breheny	N2JLF
RACES/ARES Director	Dave Gotlib	KD2MOB
RACES/ARES Liaison	Steve Wraga	WA2BYX
Newsletter Editor	Jim Jalil	W2KNG
Newsletter Publisher	Jim Cooper	W2JC
Club Station Manager	Noel Pagan	W2MSA
Quartermaster	Fred Wawra	W2ABE
W2NPT Trustee	Jim Cooper	W2JC
NK2H Trustee	Ed Efchak	WX2R

President serves as ex officio to all committees

## Want a Call Sign License Plate?

Amateur Radio (Ham operators) license plates may be purchased for a \$15 fee, for passenger vehicles, but not for commercial vehicles or motorcycles. (Applicants must be licensed by the Federal Communications Commission.)

Call MVC at 609.292.6500 or (toll free in NJ) 888.486.3339 to request an application.

The club has applications from time to time. If you would like an application, visit the "contact us" page, and we'll get one out to you.. or find the form and detailed instructions at:

<https://www.state.nj.us/mvc/pdf/vehicles/SP-23.pdf>



## Letters:

The editor has received a lot of nice notes, letters and comments about this newsletter and the club in general. We have not published them in the past but going forward we will at least try.

Here are the grounds rules:

- Please keep all comments as brief and succinct as possible.
- No personal attacks.
- No political rants.
- No comments promoting violence, racism, religious intolerance, vulgarity, obscenity, or other such discourteous behavior.
- The Editor reserves the right to exclude any comments that violate our guidelines and may subject the writer to further disciplinary action by the club.

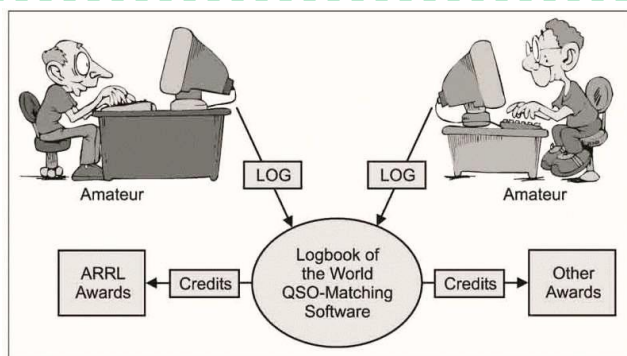


# A QSL card is the final courtesy of an amateur radio contact.

[https://en.wikipedia.org/wiki/QSL\\_card](https://en.wikipedia.org/wiki/QSL_card)

**INCOMING QSL Bureau** -- if you have been making on-the-air contacts, you might very well have a package of exciting QSL cards from around the world waiting for you at the incoming QSL Bureau. If you previously received cards from them, check to see if you have any “credits” left by going to [https://www.njdx.org/?page\\_id=869](https://www.njdx.org/?page_id=869). If you never contacted them, they probably have cards for you! Go to this page -- [https://www.njdx.org/?page\\_id=25](https://www.njdx.org/?page_id=25) and get some ‘credits’ to cover the postage for mailing your cards to you.

To learn about the W2 Bureau, [https://www.njdx.org/?page\\_id=30](https://www.njdx.org/?page_id=30)



Those who upload logs to Logbook of the World become eligible to redeem confirmation credits for awards. LoTW wants and needs *all* logs. Uploading is free, so send your logs today!

## NOTE:

While LoTW is back on line and seems to be perking along just fine, we’re advised that the DXCC part and application process is not yet restored. If you have plans to apply for DXCC, or endorsements, be patient and wait for announcement to proceed.

## Follow FLARC ON THE WEB

**Facebook:** <http://facebook.FairLawnARC.org>

**Twitter:** @FairLawnARC

**Youtube:** <http://youtube.FairLawnARC.org>

**Website:** <http://FairLawnARC.org>

## SIG Group Membership

Here is an update on the roster of Special Interest Groups... many groups have increased in size during the last month. About 45% of all members have joined at least one group.

<u>SIG Name</u>	<u>Leader</u>	<u>#</u>
Contesting	W2DLT	14
Digital Voice		30
EmComm	N2JLF	13
Monitoring	WX2R	25
DX	W2JC	18
FT8	W2JC	22
Satellites	N2AAM	20
Portable Ops	W2MSA	48
Radio Astronomy	WX2R	4
Raspberry pi		7
Direction Finding		6
<b>FLARC General</b>		<b>174</b>

Sign up for a group... or ...  
why not start one?

Contact [webmaster@FairLawnARC.org](mailto:webmaster@FairLawnARC.org)  
if you would like to start a new  
Special Interest Group.

# The Clubhouse Is Open Four Fridays In January!!

Date	Clubhouse Status
January 3	<b>CLOSED</b> – Business Meeting at Fair Lawn <b>Senior</b> Center
January 10	<b>OPEN</b>
January 17	<b>OPEN</b>
January 24	<b>OPEN</b>
January 31	<b>OPEN</b>



## Pop-Up Tuesdays are now in-person at the club.

The club will follow all borough COVID-19 requirements for these events.



**Editor's Corner — by Jim Jalil W2KNG**

January is a month of contradictions. It is a month of cold and dark, snow and ice, yet a time of hope, new beginnings, a time to set goals and resolutions for the coming year. Maybe this is a good time for FLARC and its membership to take stock of who we are, who we want to be and who we might want to become. Many businesses prepare and periodically review something called a "mission statement," that is a concise one paragraph encapsulation of what an organization is all about, what its goals are and, in short, what its mission in life is.

If the Fair Lawn Amateur Radio Club were to put together a mission statement what would it be? We can all think of many things, from a group of amateur radio operators coming together for the advancement of ham radio, being the "friendliest club around," to offering amateur radio communication services for civic functions and in times of emergency. These are things we can all agree on, and there can be so many more.

There is no right or wrong answer as to what a mission statement is or should be. It is what we want it to be. However, whatever our mission statement may be, whatever we may want it to be, it cannot have any meaning if there is not active membership participation working towards that mission.

When it comes to our members, how many members does the Fair Lawn Amateur Radio Club have? That may not be an easy question to answer. Mathematically there is the number of hams who are members by virtue of having paid their annual dues. Surely that is the first cut. But among those members who have paid their dues how many go beyond just that? How many participate in the Club's activities, its meetings, its outreach programs? The lifeblood of any organization, of any club, is its members. That is obvious. But perhaps we can amplify that a bit. Perhaps we can say the lifeblood of any organization, of any club, is its active members.

The Club has instituted an outreach program for members whose participation may have fallen off. In a sense this may be the most important initiative for 2025. A club cannot exist on dues alone. FLARC is no different. It exists in the camaraderie of coming together; it exists in the shared experiences of collective ham radio activities. It can only exist when its members are active.

It is unfortunate that many of our dues paying members are not as active as they could be. That being said the question must be asked, why? Is the Club is not providing an activity of interest to you or somehow not meeting your expectation? Has the Club somehow fallen short of what you would wish it to be? If any of that is the case, please let the Club know. There is nothing wrong with feeling the Club is not aligning with your desires or interests. What is a problem is not letting the Club know. The Club is here for you. If you have fallen away, or are not as active as you once were, think about coming back, becoming more active.

If you are disappointed with the Club for any reason, let the Club know. If there is something the Club could be doing that it is not, if there is something the Club could do better, let the Club know.

Members meet at the Clubhouse almost every Tuesday and Friday night and every Sunday morning. The Club holds its monthly meetings at the Fair Lawn Senior Center the first Friday of every month. Think about setting aside one of the times and stopping by. All Club activities are well set out in the Club newsletter, *The Resonator*. If you have gotten out of the habit of reading The Resonator every month that might be a good way to ease back into the Club.

In any case, your fellow members are here ready any anxious to see you again, to welcome you back. FLARC is called the friendliest club around for a reason. See also the Calendar page on the website.

As we move into 2025 perhaps this could be the year a member might consider becoming more active. You don't have to volunteer on any committee, you don't have to volunteer to work on Field Day, and you don't have to do anything other than show up. Just show up and be around your fellow members, your fellow hams and you will be an active member.

Consider making 2025 the year you came back to the Club, the year you came back to your ham radio home, come back to the Fair Lawn Amateur Radio Club.

— Jim Jalil W2KNG



## Vast Archive of FLARC Activities and Info

Members are reminded that we have a large archive of YouTube videos of our previous many years of Kawfee Tawk™ presentations, which cover many aspects of ham radio. Our mostly unsung hero club videographer, Thom W2NZ, has spent thousands of hours of his own time creating really professional quality videos of these 167 presentations. Visit our club YouTube page and you will see all of them listed on the main page, at <http://youtube.FairLawnARC.org>

Another large and rather unused archive is that of our seven years of the club newsletter, The Resonator. They provide a nice historical record of the many activities of FLARC over the years, as well as lots of useful info about ham radio and electronics. The entire archive is at <http://newsletters.FairLawnARC.org>

And don't forget the FILES area of our groups.io website, where useful and important info is saved:

<https://fairlawnarc.groups.io/g/main/files>

## Renew Your ARRL Dues... Send Free Money to FLARC!

The ARRL has a great program to support affiliated clubs in that it sends part of your dues back to the club if you renew through the club.

So... when you get your ARRL renewal, send both your check and your renewal application to our trusty Treasurer, who will take care of getting your renewal to Newington and a fat check for \$5.00 back to FLARC.

Nothing can be simpler...  
you just have to remember!!

Print and use the  
form on page 26  
of this issue of  
The Resonator



## Club Apparel — Get Them While They're **RED**!

Club apparel is always in vogue. Red is always "in" and your club friends all have them... you *want* a shirt or jacket for the next FLARC event! Great for Field Day!

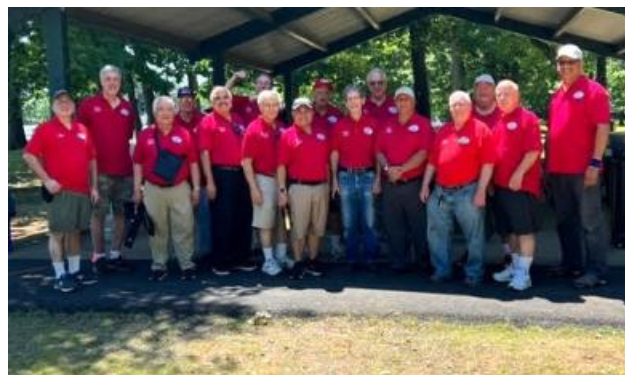
Don't forget.... they're easy to order.

Go to [www.hamthreads.com](http://www.hamthreads.com)

or visit <http://apparel.FairLawnARC.org>

**Check out the item selection that is posted on the FLARC website (with pictures and prices).** Order the shirts or other items you want with either the regular FLARC logo or the still-cool 60th anniversary logo. Note: **RED** is the primary and preferred club standard shirt color.

And why not WEAR your nice red shirt when you come to the club, especially for meetings and events.



It's easy to spot FLARC members  
wearing their red club shirts !

## Ham Radio Is Contagious And It Won't Make You Sick!!

### 2025 FLARC Net On The W2NPT Repeater:

*Near and Far Net • Mondays at 8PM*

*W2NPT Repeater and EchoLink*

**Special Note:** As non-profit, the IRS now requires that we disclose annually the use of paid lobbyists to our members and indicate approximately what percentage of their dues goes toward that. 0% of your dues payment will be used by the club to directly pay a lobbyist firm to lobby on behalf of all our members regarding pending legislation that impacts our hobby.



**NEWHAMS.INFO**

Training, information, and encouragement for new amateur radio operators.

<https://newhams.info/>

#### BEQUEATHS AND DONATIONS

Planned gifts usually imply the family donation of amateur equipment to the club when someone has become a Silent Key. But it can be more. Club members might consider making a gift through a will or trust; gifts that help provide lifetime income to the club. Consult with your lawyer, estate planner or tax advisor if you feel such a gift is worthy.

## About The Club

*The Resonator* is published monthly and is the official (and only) newsletter of The Fair Lawn Amateur Radio Club. FLARC was established in 1956 and has met continuously since inception. **The club is sponsored by the Borough of Fair Lawn.** The club meets every Friday, except when a Business Meeting is scheduled, at 6PM at the club station in The Fair Lawn Community Center, 10-10 20th Street, Fair Lawn, NJ. Business meetings are the first Friday of the month at 7:30 PM at the Fair Lawn Senior Center, and on Zoom.

Visitors **ARE ALWAYS** welcome at our meetings.

FLARC operates the W2NPT repeater (145.470- PL167.9) located high atop the Community Center. The analog repeater is open to all amateurs for use without restrictions.

The club has nearly two hundred paid members.

Dues are currently       \$25 per year;  
                                     \$20 for new members.

For more information, please see our website, at

<http://membership.FairLawnARC.org>

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Thanks!  
for your  
Support!!

**This is YOUR club.... Be a part of it !!**



**FAIR LAWN'S  
COMMUNICATIONS CENTER!**

***With Our Antennas On The Roof!***



## Around the Shack

— by Hal Kennedy N4GG

### Unlocking the Tree-Lock Problem

I've spent countless hours trying to improve wire antenna longevity. Many of those hours were spent experimenting; others were spent researching things like the strength of Copperweld wire and Dacron support rope. As my ideas have matured I've adopted a goal of 20 years of useful life for tree-supported wire antennas. A few of my wire antennas have stayed up that long, but most have fallen short.

This month's column is not, however, about keeping wire antennas up. It's about getting them down. Using Google Earth I see trees I recognize at my former QTHs, going all the way back to when I was first licensed in 1961. If those are, in fact, the same trees then there are still wires in them. It's likely antenna wire remains in trees everywhere I have ever lived, since age 13. I'm not proud of that, but short of hiring a professional tree climber, I never knew how to get down what I'd put up.

I am the Johnny Appleseed of antenna wire. Unlike apple trees however, antenna wire doesn't bear fruit to the next owner nor is it viewed favorably by those outside our hobby.

After 63 years of this I still don't have a comprehensive solution to retrieving wire stranded in trees. Once wrapped around branches or grown-over and captured in the "crotch" formed where limbs come together (arborist's term: "branch attachment"), wire and/or support lines can be, for all practical purposes, impossible to remove. Figure 1 shows a bicycle left in the crotch of a tree for a decade or two. The bike is irretrievably captured. The same thing happens to antenna wire and support ropes.



Figure 1. A bicycle left in a tree crotch. The attaching limb is long gone, the bicycle will remain forever.

If you are new to tree-supported wire antennas there is something important to know:

It's okay to use antenna wire as support line, but antenna wire should never run through the crotch of a tree. Support line turning the corner through a tree crotch should be rope, not wire.

At the contact point there is often a sharp radius and there is, of course, a lot of sawing back and forth. Metal fatigue and abrasion begin the moment you run wire around a tree limb. The result is early failure.

Copperweld wire [steel wire that is copper coated] is a particularly poor choice to run through a tree crotch. If metal fatigue doesn't cause a failure first, the copper plating will eventually wear away exposing the steel core. Rust then takes over and failure follows quickly.

When my station was in Maryland I had the good fortune to have room for a full-size 160-meter sloping dipole. I used Copperweld as a support line and that antenna fell within a week. Undaunted, I put it back up and once again it fell in a week. The Copperweld failed at the tree crotch due to metal fatigue, both times. That was a lesson learned the hard way.

How long it takes for a support line to become locked into a tree depends on several factors, but it is a question of when, not if. In my experience southern pine, being evergreen and fast growing, is among the worst tree species when it comes to locking lines. I avoid pine trees if I can.

Meanwhile, nearly any tree can capture nearly anything, including a bicycle, given enough time.

A potential solution or at least mitigation to the problem is to add a sleeve made of semi-rigid tubing to support ropes where they cross through a tree crotch. This idea was suggested to me by David Wall, NA4AE and he was kind enough to give me a five foot length of 1/4" PEX tubing to try it out. Thanks David! The concept is simple. The tubing will eventually be captured – likely forever – but the line running through it will be free to move and retrieve in the future. The result will look something like Figure 2.

Continued on next page.



**Around the Shack, Continued**

**Figure 2.** 1/4" PEX tubing before painting, in position in the crotch of a tree (at ground level – just for illustration)

Figure 3 shows PEX tubing with 1/8" low-stretch black Dacron line (my support line of choice) running through it. Note a nut has been added to the line.



**Figure 3.** A nut has been added to the support line to pull the tubing up. (The tubing hasn't been uncoiled or painted – just for illustration).

Installing the tubing is straightforward. Once the line is up and in place, slide the tubing over one end at the ground and haul it up and into place using a nut or knot to hold the tubing to the line. When the tubing is centered in the tree crotch, you can grab both ends and give a downward yank to set the tubing in place.

You can then slide enough line back through the tubing to retrieve the nut or the knot.

A word is in order about PEX tubing. It was new to me when NA4AE kindly gave me a piece. It turns out PEX (cross-linked polyethylene) has become a favored alternative to PVC and/or copper pipe for domestic plumbing. It's much easier to work with than copper and it is, of course, much less expensive. PEX tubing is readily available too. Figure 4 shows the PEX tubing bins at my local Lowes. A five foot section of 1/4" tubing is \$2.48.



**Figure 4.** The PEX tubing bins at my local Lowes.

It seems to be just what we hams need and at a ham-friendly price. Unfortunately, PEX has some significant problems both for domestic plumbing and for use as a tree-crotch sleeve.

A full treatment of the pros and cons of PEX is beyond the scope of this article. Should you wish to know more about it, there is an excellent Wikipedia entry for PEX. PEX tubing is approved in some, but not all jurisdictions for domestic water supply. The more I've learned about PEX the more I'm convinced I'd avoid having it for plumbing in my house. That is, of course, just my personal opinion. Two things about PEX argue against using it outdoors in trees. First, it is not UV-tolerant and second, rodents enjoy chewing on it.

Data on PEX's lack of UV tolerance is based on its use in plumbing. I can only speculate what that means with respect to ham radio applications. Native PEX is intolerant to chlorine and chlorine is in nearly every municipal water supply.

PEX manufacturers "solved" that problem by adding an anti-oxidant to PEX. While the anti-oxidant allows PEX to tolerate chlorine, it's the anti-oxidant additive that can't stand up to UV. In the crotch of a tree we don't need the anti-oxidant property, so PEX may be fine as a tree crotch sleeve. Or, maybe not.

Continued on next page.

## Around the Shack, Continued

Just how attractive the stuff is to critters is another concern I can only speculate about. I sprayed several coats of flat black paint onto the PEX I have in the crotch of a tree out back just before I put it up. Hopefully the paint will slow any deleterious effects from the sun – if there are any – and deter the local squirrel population from treating it as a tasty snack.

Will a PEX sleeve locked into the crotch of a tree last 20 years? I don't know. What happens to it when it “fails?” I don't know that either. This does seem like a great idea, but only time will tell. A PEX sleeve has to be better than no sleeve.

I have looked for an alternative to PEX tubing and haven't found anything suitable. An important property of PEX tubing is that while it bends easily, it tends not to kink. The wall is thick and very strong. While a tree crotch will eventually trap the tubing, I doubt it will crush it.

Irrigation tubing – the kind that comes in small sizes and is used for drip irrigation in gardens and greenhouses looked promising, but it has its own drawbacks. On the plus side, irrigation tubing comes in useful sizes, is inexpensive, is black or dark green and is designed to be outdoors in UV light. Also, rodents don't like it.

Unfortunately, small irrigation tubing will kink at a tight radius and the ID (inside diameter) is very rough. The ID of some 1/4” irrigation tubing I tested was so rough I couldn't pull 1/8” Dacron line through five feet of it.

In addition to having my new EFHW antenna support-line running through PEX tubing at a tree crotch, I've taped two 5-foot sections of 1/4” PEX tubing to the back fence as an experiment. One is painted flat black, the other is unpainted.

How long will it take before UV exposure causes something bad to happen? How long will it be before the squirrels attack? I'll let you know.

73, Hal N4GG

## HAMSPEAK

### RADIALS

A set of wires laid on or slightly in the ground in the shape of a hand fan but usually 360 degrees all around. Radials are used to enhance the ground system of an antenna usually on a tower.

### COAX

Short for coaxial as in coax cables. A coax has a center conductor surrounded by a shield with an insulator holding the center conductor in the center.

### BALUN

An RF transformer that allows unbalanced lines to be interfaced with balanced lines as in connecting a dipole antenna to a coax.

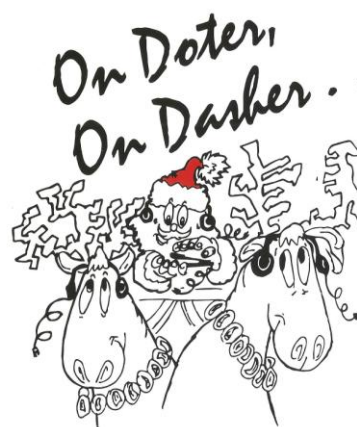
### PL259 CONNECTOR

A connector commonly used to connect coaxial cables to devices using RF such as a HAM radio transceiver.

### DUMMY LOAD

A resistive load used to test or adjust RF transmitters without actually putting a signal out on the air.

— Fred Wawra, W2ABE, 73.



Even Santa uses Dots and Dashes



## Theoretics Demystified

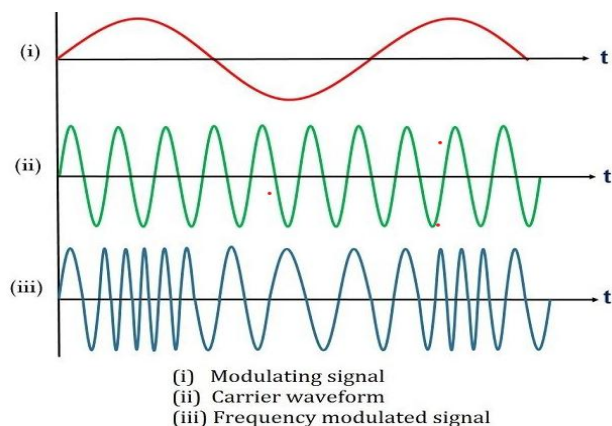
Continuing the series, 'Evolution of Radio' we started with spark and then RF alternators and into vacuum tubes being used to transmit and then receive signals. Then we got a little more complicated with the theory of heterodyning [the taking of two signals and ending up with the sum and difference of the same] as in the super heterodyne receivers.

These were all great steps forward, but radio was still plagued by static from other electrical sources and especially lightning. There needed to be something better, especially when transmitting music and spoken words. There had to be something that was not affected by Amplitude Modulated signals, man-made or natural. This led to the invention of Frequency Modulation.

With FM the carrier level does not change but the frequency of the carrier changes in response to the instantaneous level of the input modulating signal. This eliminates the reception of any signals that vary in amplitude such as static from electrical sparking or lightning in particular. This is a desirable effect so as to have clean and higher fidelity signals at the receiver.

As a bonus, the audio frequency response of FM broadcast goes up to 15,000 Hz as opposed to AM where the audio signals are limited to a frequency response of 5,000 cycles or Hertz per second.

The following is a representation of how a carrier is frequency modulated.



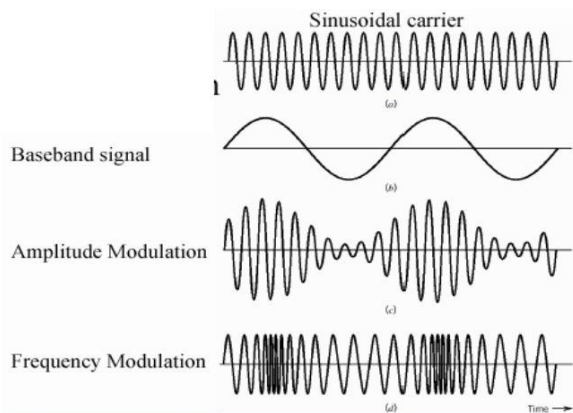
On the down side, FM requires 20 times the band width of an AM broadcast station. This also means that to be practical, the FM band needs to be in the 30 to 300 mega Hertz frequency range – which is line of sight as opposed to AM on the medium frequency band which propagates using ground waves. AM is far reaching, especially at night, on the medium wave band, but FM has the fidelity.

Reception of FM signals are subject to what is called the capture effect. This happens at the receiver when there are two signals, on the same frequency, where one is stronger than the other. When there is a second signal due to the original signal being reflected off of objects what happens is that the stronger of the two signals is demodulated and the weaker one is suppressed.

The other phenomena associated with FM signals having secondary reflections is multipath distortion which can sound like a hissing sound or fading of the desired signal. This occurs when the broadcast signal [FM broadcast band] is reflected off metallic objects and even persons walking near an FM receiver. This generates a split signal with a time delay of the reflected signal which the receiver tries to demodulate but ends up as previously mentioned with a cancellation/fading of the desired signal or a hissing sound in place of the desired signal. Using FM for digital signals is more complicated as opposed to broadcast band voice and music. More follow up on FM next time.

Where do HAMS find FM in use? In most all of our VHF and UHF radios - be they handheld, mobile or home based.

Fred Wawra, W2ABE, 73.



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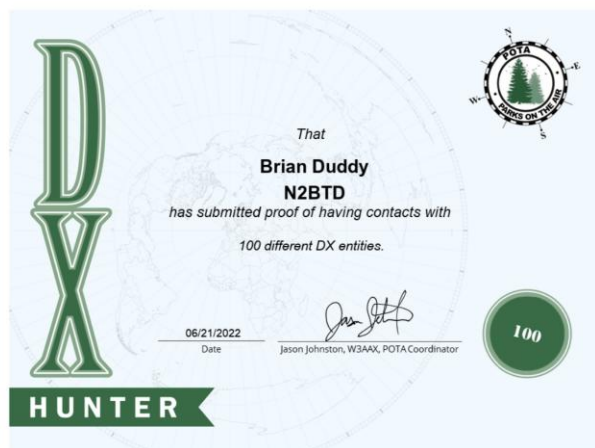


## FLARC PortableOps SIG

PortableOps@FairLawnARC.groups.io

This is a Special Interest Group (SIG) for members interested in portable ham radio operation such as POTA, SOTA, IOTA, LOTA, etc. The purpose of this SIG is to get outdoors and practice our operating skills from different places. We can share outing experiences, tips and work on our operating skills.

Congratulations to Brian N2BTD for working his 100th Entity (DXCC) in the Parks on the Air (POTA) program. Brian's 100th Entity was VP2ETX (WW5TX) at AI-0004 Shoal Bay-Island Harbour Marine Park on the island of Anguilla.



Noel W2MSA at Garret Mountain, doing POTA

## HAM RADIO STATISTICS

Here are some interesting statistics relating to amateur radio. As of November 2024 there were 743,845 licensed amateur radio operators in the United States.

Of these 156,263 (21%) were Extra Class, 29,385 were left over Advanced Class (which class has been grandfathered and those in that class may continue in that class), 184,865 were General Class (24%), 368,198 were Technician Class (49%) and 5,094 were left over Novice Class licensees (which had 10 year terms).

There are some interesting observations that can be gleaned from this data. Putting aside the statistically very small percentage of hams that are Advanced and Novice classes, the basic demographic among American hams is that roughly half of all hams are Technicians. Extras and Generals are each roughly a quarter of all hams.

What about the growth, or contraction, of ham radio? Since December 2021 there has been a loss of 35,749 licensed ham radio operators, a decrease of 4.59%. The largest drop among the classes was the Technician Class which had a drop of 28,034 or 7.08%. (Again we are ignoring the statistically small Advanced and Novice classes).

There are a few obvious reasons for this drop off. One, since the Technician class is most often the entry level class, it is a sad reality that many get their license but soon lose interest and drop out of the hobby. By the way, there is nothing new or particularly alarming about that. For those hams of a "certain age" who got into ham radio in the so-called golden age of the late 1950s through mid 1960s, how many remember the vast number of our peers who got the one year Novice license, then let it expire and never moved on. The truth is... tons.

So let's not despair about Techs dropping out. It has been going on forever. In any case volumes have been written about this phenomenon, and we will leave it at that. But on the positive side of things, another reason for the drop off has to be Techs upgrading to General and Extra. The drop off is not all doom and gloom.

In fact Extra Class licensees increased from December 2001 to November 2024 by 1,916 a 1.25%. Generals had a decrease of 1,132 or a 0.61% decrease, which is a very small percentage — so small that statistically it can be seen as almost flat. In any event this too can be attributed to some extent to upgrades to Extra.

Moreover the statistics offer an interesting insight into the canard that ham radio is a "dying" hobby of interest

**HAM RADIO STATISTICS, continued**

only to “old” people who are slowly dying out. The statistics show exactly the opposite. Let’s step back a bit. The largest demographic of the American population are our seniors, the so called “Baby Boomer” generation, those born between 1945 and 1964. In any random sample of any population group across the country, if it is truly random, most people in that random group will be Baby Boomers.

What follows from that is Baby Boomers, being older, have a higher mortality rate than other demographic age groups (by reason of age alone) and are passing in greater numbers than any other demographic generation (trying not be morbid, but actuarially accurate).

One can make the assumption that any ham who has been in the hobby over a very long lifetime is less likely after 40 years to be a Tech. Some are, to be sure (and there is nothing wrong with that), but the vast majority of old timers are not Techs.

The vast majority of old timers, the Baby Boomers, are General and Extra Class licensees. So if ham radio was dying along with the Baby Boomer generation, the two main license classes these old timers have, General and Extra Class, would be experiencing dramatic drops in numbers. But the Extra Class actually grew over the four year span December 2021 through November 2024! The General Class contracted very slightly and, as stated above, can be seen to be statistically flat. If this were a dying hobby, if the old timers were dying off and no one in the younger generations were coming up to take their place, then the General Class and Extra Class licensee numbers would have seen a dramatic fall off. Exactly the opposite is the case.

So next time you hear people say... you people still do that? Or, worse yet, ham radio is attractive only to old men and women from the 1950s and 1960s, and as they die off ham radio will die with them... laugh in their face. They have no idea what they are talking about. We know better and the statistics back us up.

There are many Baby Boomers who were first licensed in the 1950s and 1960s and are still on the air and God Bless them. But many have passed. To say there were no hams in the younger generations who came up, and are coming up, to take their place is just flat out wrong.

Ham radio is as strong as ever and is doing very well.

— Jim Jalil W2KNG

**FLARC December 21, 2024  
VE Testing Results**

With VE testing back on schedule,  
Gene **W02W** reports the following results:

Name	Call	License Earned
There were		
No tests given		
In December		

Testing for next month will be at the  
Fair Lawn Recreation Center.

**Eleven Special Interest Groups [SIGs]  
Already Formed: Any Others?**

Club interest continues to grow in the SIGs.

Another recently formed SIG is for those interested in Raspberry Pi and Arduino projects, but now includes DoItYourself (DIY)/Makers kit building, 3D printing and similar topics.

A list of all of the current SIGs is shown on page 12.

Other possible groups, from the member survey, include:

- *Radio Propagation*
- *Antennas and how they work*
- *Ham radio software*
- *Technical assistance to club members*

Anyone interested in leading any of these groups...?

Please contact [webmaster@FairLawnARC.org](mailto:webmaster@FairLawnARC.org)

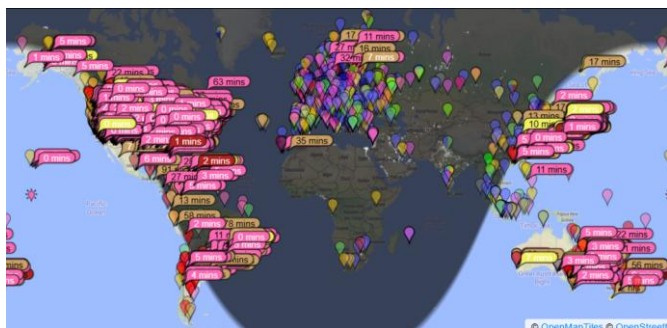


## DX Special Interest Group Update

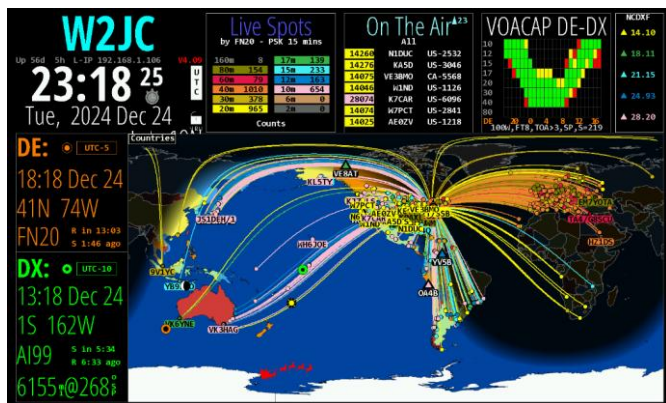


Probably most hams who “chase DX” know about the various Spotting Servers and other web pages that show what stations are active at the moment and what frequencies they are using. Most of these display the info as columns with the data.

Only for CW and FT8/4, PSKreporter shows an excellent world map displaying current QSOs; but SSB and other modes cannot be displayed.



A software program called Ham Clock also displays a world map, and it gets ALL modes from the spots on the spot servers.

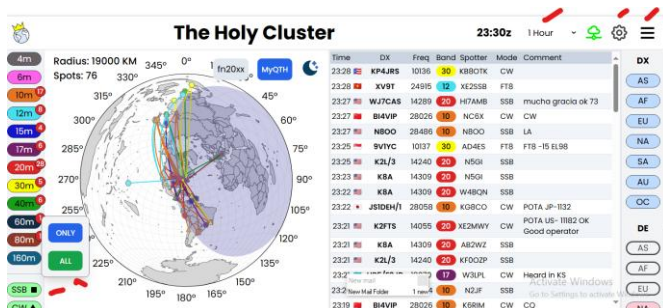


A new server has come on-line which shows BOTH the columns of data and the world map. Thanks to Zev N2WKS for this info –

“The open-source team of the Israel Amateur Radio Club released a new graphic cluster this week called \*The Holy Cluster.\*”

In addition to the familiar tabular cluster, it includes an azimuth map displaying all spots in different colors. This feature provides a real-time overview of the airwaves—showing which bands are open and in which direction. You're welcome to try it and enjoy.”

<https://holycluster.iarc.org>



- You can set YOUR location (6-char grid square) by clicking on the ‘gear’ icon at upper right.
- Use the “hamburger” icon at the upper right to select display options.
- If you click on the “moon” icon you can overlay the “Grey Line” darkness area on the map.
- If you click on the “hamburger” icon at the upper left, you can select which bands are displayed. Scroll down this menu and you can also filter by mode(s). This also filters the text spots on the right side.
- At the upper right is a drop down menu where you can set how many minutes back you want to display the spots.

Reported by Jim W2JC

## EmComm SIG Updates

### [Emergency Communications via Ham Radio]

Amateur radio operators use their training, skills, and equipment to provide communications during emergencies. Hams serve our communities when storms or other disasters damage critical communication infrastructure, including cell towers, and wired and wireless networks. Amateur radio can function completely independently of the internet and phone systems. An amateur radio station can be set up almost anywhere in minutes. Hams can quickly raise a wire antenna in a tree or on a mast, connect it to a radio and power source, and communicate effectively with others.

## Ham radio is still a disaster lifeline, even in the iPhone era - here's why

<https://www.zdnet.com/home-and-office/networking/ham-radio-is-still-a-disaster-lifeline-even-in-the-iphone-era-heres-why/>

## 2nd annual GoBox Expo!!

Monmouth County ARES will be holding the Expo on Saturday, January 11, 2025 from 2:30 to 4:30 PM. Setup begins around 1:00 PM at the Red Cross building, 1540 West Park Ave., Ocean Township.

You will gain a tremendous amount of knowledge and fantastic ideas on setting up a portable amateur radio station.



## ELECTRONIC DUES PAYMENTS ARE NOW AVAILABLE!



**FLARC dues, new and renewal — and even donations! —  
can now be made on-line ...**

Until permanent arrangements can be made, several fiduciaries of the Fair Lawn Amateur Radio Club have graciously agreed to forward electronic payments to the Club's bank account.

Payments can be made using either PayPal or Zelle account.



- Log into your PayPal account
- Locate the Send Money function
- Use the following email address as the recipient:  
[1947xyzabc1947@gmail.com](mailto:1947xyzabc1947@gmail.com)
- Enter the appropriate \$ amount for your dues
- In the notes section, include your Call Sign and what year(s) the dues are for
- When prompted, indicate that you are "Sending to a friend"
- Log into your Zelle account
- Use the following phone number as the recipient: 201-240-9317
- In the notes section, include your Call Sign and what year(s) the dues are for

Once complete, you may – for added assurance - send a screenshot to  
[treasurer@FairLawnARC.org](mailto:treasurer@FairLawnARC.org)

– please be sure to redact any personal information –  
(e.g. bank account number, balance, etc.)

**For both new and renewal, please complete the Membership Application form at**  
**<https://FairLawnARC.com/membership.pdf>**  
with your current info and either give it to a club officer  
or mail it to the address on the form.

For additional information on club membership, visit  
<http://membership.FairLawnARC.org>

Visit the club website at <http://FairLawnARC.org> for info about the club,  
club activities, club history and our club 2-meter repeater.

Continued on next page.



For a PDF form that can be filled in on-line, then printed and mailed with check, [CLICK HERE](#)

Or you can print this page, fill it in and mail to the address shown at the bottom.



## Fair Lawn Amateur Radio Club

*Fair Lawn Recreation and Community Center  
10-10 20th Street  
Fair Lawn, N.J. 07410*

### MEMBERSHIP/RENEWAL FORM

Name \_\_\_\_\_ Call \_\_\_\_\_  
Address \_\_\_\_\_ PO Box \_\_\_\_\_ Ste./Apt # \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Roster Published Phone # \_\_\_\_\_ Unpublished Phone # \_\_\_\_\_  
Roster Published EMAIL \_\_\_\_\_ License class: \_\_\_\_\_

Check all that apply      ARRL Member ?      RACES Member ?      ARES Member ?      CERT ?      VE ?

Additional Family Members (In same household) --

Name \_\_\_\_\_ Call \_\_\_\_\_

Name \_\_\_\_\_ Call \_\_\_\_\_

Introductory and Student Membership      \$ 20      \$ \_\_\_\_\_  
(Students under the age of 18 eligible for student membership)  
(Introductory membership open to new members  
or not a member in last 7 yrs)

Associate Membership \*      (No Fee)  
\* Open to Fair Lawn Residents Only. No voting rights or other privileges.

Renewal of Current Membership      \$ 25      \$ \_\_\_\_\_

Three Year Renewal Incentive      \$ 65      \$ \_\_\_\_\_

(Single memberships only, family memberships excluded)

Additional Family Members    # \_\_\_\_\_ at      \$ 5 each      \$ \_\_\_\_\_

Life Membership      \$ 625      \$ \_\_\_\_\_

Senior Life Membership (65 yrs. of age or over)      \$ 250      \$ \_\_\_\_\_

Equipment Fund Donation, above regular membership dues      \$ \_\_\_\_\_

Total submitted      \$ \_\_\_\_\_

\_\_\_\_\_ Date \_\_\_\_\_

I hereby acknowledge the By laws and rules and regulations of the club and will abide by them as amended

Please Note: Memberships are NOT Pro-Rated. Membership is from Jan 1<sup>st</sup> to Dec. 31<sup>st</sup> of any given year unless documented otherwise.

Please make your dues check payable to the "Fair Lawn Amateur Radio Club" and remit to the following address:

**Fair Lawn ARC  
– Attn: Treasurer  
10-10 20<sup>th</sup> Street  
Fair Lawn, NJ 07410**

Complete this form for NEW or RENEWAL of ARRL membership  
and give to FLARC Treasurer [David Gotlib KD2MOB] with your payment check.



**ARRL**  
The National Association for  
Amateur Radio®

## Membership Application

☐ New    ☐ Renew    ☐ Previous Member    ☐ Unlicensed

Name \_\_\_\_\_ Call Sign \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Email \_\_\_\_\_ Phone \_\_\_\_\_

Date of Birth \_\_\_\_ / \_\_\_\_ / \_\_\_\_

**My Family Member is Joining or Renewing: (\$12 per member)**

Name \_\_\_\_\_ Call Sign \_\_\_\_\_

Name \_\_\_\_\_ Call Sign \_\_\_\_\_

☐ Please note my new address    ☐ I do not want my name and address made available for non-ARRL related mailings

### Your Annual Membership Dues\*

Circle Your Choice (rates effective Jan. 1, 2024)

	1 Year	3 Years
Standard membership	\$59	\$174
Family (same membership exp. date and address)	\$12	\$36
Student (must be under age 26)	\$30	
Blind (requires one-time statement of legal blindness)	\$12	\$36

### Add-on ARRL Subscriptions

**QST**, ARRL's membership journal for active radio amateurs.

☐ 1 Year \$25\*    ☐ 3 Years \$75\*

**On the Air**, For beginner-to-intermediate-level radio amateurs.

☐ 1 Year \$25\*    ☐ 3 Years \$75\*

### Member Benefits

Your membership supports benefits, services, and programs that keep you active and on the air.

#### Membership Includes:

- Access to four digital magazines and archives (*QST*, *On the Air*, *QEX*, & *NCJ*)
- Unlimited courses through the ARRL Learning Center ([learn.arrl.org](http://learn.arrl.org))
- Logbook of The World®, contests, and award programs

...and more!

\*A print subscription for *QST* and/or *On the Air* requires an ARRL membership. Dues and subscription rates are subject to change without notice and are non-refundable

### Payment Information

\$ \_\_\_\_\_ Total Charge to:    ☐ Visa    ☐ MasterCard    ☐ AmEx    ☐ Discover    ☐ Check Enclosed

Card Number \_\_\_\_\_ Expiration Date \_\_\_\_\_

Card Holder's Signature \_\_\_\_\_

Toll Free (US) 1-888-277-5289 or 860-594-0200 • ARRL, 225 Main St., Newington, CT 06111-1400  
membership@arrl.org • [www.arrl.org/join](http://www.arrl.org/join)

CLUB  
form rev 1/24

**January 2025****FLARC Business Meeting**

FAIR LAWN AMATEUR RADIO CLUB  
 MINUTES of BUSINESS MEETING  
 Fair Lawn Senior Center  
 January 3, 2025

The Club's President Gene WO2W called the meeting to order at 7:30 PM.  
 At his request the members present in person rose and recited the Pledge of Allegiance.

Club Secretary Jim W2JC checked the officer role.  
 The Secretary found the following:

President	Gene	WO2W	Present
Vice President	Nomar	NP4H	Present (by Zoom)
Treasurer	Robert	KD2SOG	Present
Secretary	Jim	W2JC	Present
Trustee	Van	W2DLT	Present (by Zoom)
Trustee	Brian	KD2KLN	Present
Trustee	Judith	KC2LTM	Present (by Zoom)

The Secretary confirmed to the President that a quorum existed in order for the meeting to proceed and business be conducted.

The President then asked for a motion to approve the minutes of the meeting held December 12, 2024 as published in the December Resonator. Upon motion made by Dave WO2X and seconded by Nomar NP4H the minutes were unanimously approved.

The President then asked the Treasurer, Robert KD2SOG, to give the Treasure's Report. Robert gave the various account balances. Board has authorized W2MSA to acquire two "headset" type microphone/earphone units for use with the Flex radios on Winter Field Day – and also at the club station of course. Cost of approximately \$73. Upon motion duly made by Nomar NP4H and seconded by Brian KD2KLN the Treasurer's Report was unanimously approved. Some discussion followed regarding how the club funds are banked; president indicated we will have more flexibility after the incorporation is filed.

Treasurer indicated that if you pay your dues "on line" using Zelle you should also fill out an updated membership form (see Resonator or website) and bring it to the club or mail it to the address shown on the form.

Technical committee report was given by Dave WO2X. He reported that Jim W2JC and Brad KM2C (former club president) were at the club last Friday night and "restored" the club internal WiFi. Brad was familiar with the internet router we use and he reset the network and WiFi settings for us. The WiFi password will be posted in the club rooms.



## **January 2025 FLARC Business Meeting, cont'd.**

Jim W2JC is developing documentation for the entire configuration of network and equipment in the club-house, which will make support and maintenance more practical in the future. Dave WO2X again thanked Brad and Jim for their efforts.

A question was raised from the floor asking about the status of the antenna rotor that was removed from Tower 1 last fall. Gene WO2W indicated that the rotor is still on the workbench at the club, with plans to have it inspected and repaired if necessary.

Robert KD2SOG reported on the Youth Committee. He reminded everyone that the Super Science Saturday event in Ridgewood, NJ will be on March 1<sup>st</sup> [Saturday] and we already have six tables reserved for our presentation(s). We plan to have the ever-popular Morse Code demonstration. Dave WO2X has indicated that he can get a quantity of “abandoned” QSL cards from the Incoming QSL Bureau to give out to interested visitors. “Kids love tactile stuff like that” said Robert. Other displays such as the Ham Radio Clock, which displays a world map with the grey-line, the position of sun and moon, and lines showing current ham radio QSOs around the world... and perhaps an FT8 waterfall to demonstrate our use of computers along with ham radio (wireless technology). Summarizing, Robert said: “What I’m trying to avoid is that for several years in the past we have just had several guys sitting in front of black boxes (radios) operating; that just doesn’t look like anything to the kids – it’s not interesting to them.”

There are still several openings available for volunteers, and if you have not already signed up to help with this event just contact Robert KD2SOG by email or at the club. We’ve been at this event for several years now and they like our presentation a lot, and it’s a lot of fun to tell the public about ham radio and all its aspects. Volunteers should be signed up by the end of January.

The other major project of the Youth Committee involves helping the Paterson NJ school system plan and operate a radio contact with the International Space Station (ISS). FLARC did this with the Fair Lawn schools many years back and it was a great success. The Paterson application was submitted and returned with some questions, and a clarified application was submitted in November. The application has been accepted and we are currently “on the list” for a contact with ISS in the August through December 2025 time slot. (Actual scheduling is dependent on many factors, including availability of on-board hams, work schedule on the ISS, and such.) Steve WI2W and Robert KD2SOG are FLARC’s coordinators on this project, and they will be having a Zoom meeting with the NASA reps to provide additional details on what we are expected to provide for the event.

New subject: President Gene WO2W indicated that he would like to get an operational Ham Clock display running at the club, using the large screen video (which we also use for display at club meetings, etc). Several members at the meeting indicated interest in working on this project.

## January 2025 FLARC Business Meeting, cont'd.

No other committee reports, so President Gene called on Noel W2MSA to report on plans for our Winter Field Day event.

Noel reported that “we should be good to go” and that Dave WO2X is going to set up the three stations, with their laptops and logging and networking. All three stations will be set up inside the Pompton Lakes OEM command vehicle, which was also used last year for WFD. FLARC member Mike Volpe KD2YEW will be supervising the use of the van, as he is our liaison with the Pompton Lakes OEM.

Noel W2MSA said: “We are looking forward to this event and it should be a fun time” – especially since we will be inside the heated vehicle! Noel also indicated that we might have a satellite station as well as the three Flex HF stations.

President Gene WO2W reminded everyone of the Monday night “Near and Far” net at 8pm local time every week on the FLARC repeater (with EchoLink call-in as well). One of our members has been vacationing in Europe last month and one week he checked in from a river cruise boat on the Rhine river in Germany; another week he checked in from London and also once from Paris, France!

Also on Tuesday and Friday evenings the club is open from about 6:30pm to 9pm for “eyeball QSOs” (chatting), workbench projects, operating on-the-air (remember, Technician licensees can operate the HF DX bands from the club when there is a General or Extra class member with them).

And on Sundays there is the “Sunday Morning Breakfast Club” from around 9am until noon or so. Breakfast is NOT provided by the club! But you can bring your own goodies. There is usually a good crowd at the club on Sunday mornings.

Webmaster Jim W2JC reminded everyone to check the main page of the club website (<http://FairLawnARC.org>) to be sure any event they plan to join has not been cancelled for some reason. Event reminders and cancellation notices are posted there.

Health and Welfare report was given by Judith KC2LTM. She said: “I have nothing to report, thank goodness!”

President Gene WO2W indicated that he has already put together “quite a few items that I would like to get accomplished this year.” One that is already underway is that he has ordered an 8 by 4 foot (six feet tall) rolling shelf unit for our storage room in the basement. The shelf was only \$78, and some bins will also be ordered so that various items such as paper plates, plastic utensils, and such can be organized all in one place.

## January 2025 FLARC Business Meeting, cont'd.

President Gene WO2W announced a number of dates for upcoming events.

- January 25<sup>th</sup> & 26<sup>th</sup> [Sat & Sun] Winter Field Day
- April 18<sup>th</sup> [Friday] World Amateur Radio Day
- April 22<sup>nd</sup> [Tuesday] Earth Day at Great Falls
- May 26<sup>th</sup> [Monday] Fair Lawn Memorial Day parade
- June 14<sup>th</sup> [Saturday] FLARC Hamfest (rain date June 21<sup>st</sup> )
- June 22<sup>nd</sup> [Sunday] Fair Lawn Street Fair
- June 26<sup>th</sup> & 27<sup>th</sup> [Sat & Sun] 2025 Field Day
- July 2<sup>nd</sup> [Wed] Fair Lawn Fireworks
- October 19<sup>th</sup> [Sunday] Fair Lawn Street Fair

Ed WX2R expounded further about World Amateur Radio Day, indicating that full details and story will be in the March 2025 issue of QST Magazine. This is also the 100<sup>th</sup> Anniversary of the IARU [International Amateur Radio Union]. Ed hopes that as in past years FLARC can put our club call W2NPT on the air as part of this celebration.

Van W2DLT indicated that FLARC members have been invited by Nathaniel Frissell, W2NAF to visit the new Scranton University amateur radio club station, W3USR. Van said: "This is a new, beautiful amateur radio station on the fifth floor overlooking the town of Scranton, with some wonderful equipment. Nathaniel will have a group of experts to speak to us about the radio propagation science projects that are being done at Scranton, as well as give us a tour of the station." The University would prefer this occurred on a weekday, and Van recommends Thursday because that is the day they have Open House.

<https://www.scranton.edu/academics/cas/physics-engineering/w3usr/index.shtml>

Like the club has done in the past for trips to ARRL and W1AW, we could organize a car-pool... Scranton is only about 2 hours from Bergen County. Some time in April was suggested. Van would like to know which members are interested in this trip, so planning can begin.

President Gene took a vote of the members present and more than half said a weekday is OK, and only one said only a weekend would be good. More info will be forthcoming.

Motion to close the meeting was made by KC2ORX, seconded by N2SU.  
Meeting was closed at 20:06.